

## Amendment of the Claims

### In the claims:

Please amend the claims as follows (additions are underlined and deletions are struck through):

1-48. (Cancelled).

49. (Currently Amended) A method of producing an edible plant whose edible portions comprise significant concentrations of selenium the method comprising:

growing an edible *Brassicaceae* plant in an environment that contains selenium under conditions that allow the plant to accumulate selenium in its edible portions, ~~whereby the plant is a member of the family Brassicaceae~~; and

harvesting the plant after it has accumulated selenium in ~~[[its]]~~ the edible portions to a concentration higher than that of the selenium in the environment, wherein the ~~step of harvesting comprises harvesting the plant after it has accumulated~~ concentration of selenium in ~~[[its]]~~ the edible portions is at least about 2500 mg/kg dry weight, to a concentration that is several fold higher than that of the selenium in the environment and wherein at least 20% of the accumulated selenium is in the form of Se-methyselenocysteine.

50. (Cancelled).

51. (Cancelled).

52. (Cancelled).

53. (Cancelled).

54. (Cancelled).

55. (Cancelled).

56. (Cancelled).
57. (Currently Amended) The method of claim 51, wherein:  
the plant is a ~~member of the family Brassicaceae~~ Brassica plant.
58. (Currently Amended) The method of any one of claims 49 or 51, wherein:  
the plant is of a species selected from the group consisting of *Brassica juncea*, *Brassica oleracea*, and *Brassica carinata*.
59. (Cancelled).
60. (Cancelled).
61. (Cancelled).
62. (Cancelled).
63. (New) A method of producing an edible plant whose edible portions comprise significant concentrations of selenium, the method comprising:  
growing an edible *Brassicaceae* plant in an environment that contains selenium under conditions that allow the plant to accumulate selenium in the edible portions; and  
harvesting the plant after it has accumulated selenium in the edible portions to a concentration higher than that of the selenium in the environment,  
wherein the concentration of selenium in the edible portions of the plant is at least about 2000 mg/kg dry weight, and  
wherein at least 20% of the accumulated selenium is in the form of Se-methylselenocysteine.
64. (New) A method of producing an edible plant whose edible portions comprise significant concentrations of selenium, the method comprising:

growing an edible *Brassicaceae* plant in an environment that contains selenium under conditions that allow the plant to accumulate selenium in the edible portions; and

harvesting the plant after it has accumulated selenium in the edible portions to a concentration higher than that of the selenium in the environment,

wherein the concentration of selenium in the edible portions of the plant is at least about 1500 mg/kg dry weight, and

wherein at least 20% of the accumulated selenium is in the form of Se-methylselenocysteine.

65. (New) A method of producing an edible plant whose edible portions comprise significant concentrations of selenium, the method comprising:

growing an edible *Brassicaceae* plant in an environment that contains selenium under conditions that allow the plant to accumulate selenium in the edible portions; and

harvesting the plant after it has accumulated selenium in the edible portions to a concentration higher than that of the selenium in the environment,

wherein the concentration of selenium in the edible portions of the plant is at least about 1000 mg/kg dry weight, and

wherein at least 20% of the accumulated selenium is in the form of Se-methylselenocysteine.